

What is claimed is:

1. A method for the preparation of a glucose polymer having an ion-exchanging ability comprising the steps of drying a mixed aqueous solution
5 containing a raw glucose polymer and a polyvalent carboxylic acid to thus form a uniform powdery mixture and then subjecting the powdery mixture to a heat treatment.
2. The method for the preparation of a glucose polymer of claim 1,
10 wherein the raw glucose polymer is at least one member selected from the group consisting of oxidized starch, starch hydrolyzates, hydrogenated starch hydrolyzates and digestion-resistant starch hydrolyzates and the average degree of polymerization thereof ranges from 4 to 123.
3. The method for the preparation of a glucose polymer of claim 1,
15 wherein the raw glucose polymer is at least one member selected from the group consisting of oxidized starch, starch hydrolyzates, hydrogenated starch hydrolyzates and digestion-resistant starch hydrolyzates and the average degree of polymerization thereof ranges from 4 to 18.
4. The method for the preparation of a glucose polymer as set forth in any
20 one of claims 1 to 3, wherein the polyvalent carboxylic acid is at least one member selected from the group consisting of citric acid, succinic acid, maleic acid, fumaric acid and tartaric acid.
5. The method for the preparation of a glucose polymer as set forth in any
25 one of claims 1 to 4, wherein the glucose polymer has an ion-exchanging ability index as expressed by the function: $Y = AB$ (Y represents an ion-exchanging ability index, A represents the amount of linked polyvalent carboxylic acid and B represents an esterification index) ranging from 0.1 to 0.5.
6. The method for the preparation of a glucose polymer as set forth in any

one of claims 1 to 5, wherein the temperature of the powder upon the heat-treatment ranges from 100 to 160°C.

7. The method for the preparation of a glucose polymer as set forth in any one of claims 1 to 5, wherein the temperature of the powder upon the heat-treatment ranges from 100 to 125°C.

8. The method for the preparation of a glucose polymer as set forth in any one of claims 1 to 7, wherein the mixing ratio (molar ratio) of the raw glucose polymer to the polyvalent carboxylic acid ranges from 1.5: 1 to 9:1.

9. A composition comprising a glucose polymer prepared according to the method as set forth in any one of claims 1 to 8 and having an ion-exchanging ability.

10. A builder comprising a glucose polymer prepared according to the method as set forth in any one of claims 1 to 8.

11. A detergent comprising a builder as set forth in claim 10.

12. A food comprising a glucose polymer prepared according to the method as set forth in any one of claims 1 to 8.

13. A food comprising a glucose polymer prepared according to the method as set forth in any one of claims 1 to 8, in the calcium-ion-exchanged form.